

## REMARKS

Upon entry of this response, claims 7-17 and 22-34 are pending. Claim 12 has been amended. Claims 16 and 34 have been withdrawn. Claim 1-6 and 18-21 have been canceled in prior responses.

Support for the amendment to claim 12 is found at least at ¶0046, as appearing in corresponding U.S. App. Pub. No. 2005/0049313.

No new matter has been added by way of this response.

### **Withdrawn Election Requirement**

Applicants acknowledge withdrawal of all prior restriction and election requirements.

### **Election/Restrictions Required**

The Office now requires an election of invention Group I (claims 7-15, 17 and 22-33) or invention Group II (claims 16 and 34). In response to the Office's invention group election requirement, Applicants elect invention Group I claims 7-15, 17 and 22-33 for further examination.

The Office additionally requires a series of species elections. It is noted that at least current claim 7 is generic to all species. In electing the species below, Applicants request REJOINDER, under MPEP § 821.04, of the non-elected species claims upon allowance of any generic claims or claims directed to the elected species.

In response to the Office's species restriction of A(a-b), Applicants elect species A(a), which is a naphthoquinone derivative. Claims 22-33 are readable on the A(a) elected species and are designated for further examination.

In response to the Office's sub-species restriction of A(a)(i-ii), Applicants elect species A(a)(i), which is a one or more kinds of naphthoquinone molecule. Claims 22-33 are readable on the A(a)(i)(b) elected sub-species and are designated for further examination.

In response to the Office's sub-sub-species restriction of A(a)(i)(a-b), Applicants elect species A(a)(i)(b), which is a 2-methyl-1,4-naphthoquinone (VK3) derivative. Claims 23-33 are readable on the A(a)(i)(b) elected sub-sub-species and are designated for further examination.

In response to the Office's sub-sub-sub-species restriction of A(a)(i)(b)(Xa-Xp), Applicants elect species A(a)(i)(b)(Xb), which is a 2-methyl-1,4-naphthoquinone (VK3 derivative modified with a carboxyl group). Claims 26-33 are readable on the A(a)(i)(b)(Xb) elected sub-sub-sub-species and are designated for further examination.

In response to the Office's sub-sub-sub-sub-species restriction of A(a)(i)(b)(X)(AA1-AA3), Applicants elect species A(a)(i)(b)(X)(AA1), which is 2-(3-carboxypropyl)-3-methyl-1,4-naphthoquinone (CPVK3), represented by formula (1) in the specification. Claims 32-33 are readable on the A(a)(i)(b)(X)(AA1) elected sub-sub-sub-species and are designated for further examination.

In response to the Office's species restriction B(1-4), Applicants elect species B(1), which is at least one enzyme and an electrode. Claims 7-15, 17 and 22-33 are readable on the B(1) elected species and are designated for further examination. If the Office intended the species election group to be "one enzyme and an electrode", rather than the "at least one enzyme and an electrode" as recited in the Action, Applicants elect one enzyme and an electrode, read on by claims 7-9, 13-15, 17, and 22-33, designating such for further examination.

In response to the Office's species restriction of C(a-b), Applicants elect C(b), which is whereby the enzyme or enzymes are immobilized. Claims 8-15 are readable on the C(b) elected species and are designated for further examination.

In response to the Office's species restriction of D(x-z), Applicants elect D(x), which is whereby the enzyme contains diaphorase. Claims 9-12 are readable on the D(x) elected species and are designated for further examination.

In response to the Office's species restriction of E(a-b), Applicants elect species E(a), which is further comprising NADH immobilized. Claim 12 is readable on the E(a) elected species and is designated for further examination. Applicants note the present amendment to claim 12, which clarifies that NADH is an organic non-protein small molecule.

In response to the Office's species restriction of F(m-n), Applicants elect species F(m), which is whereby the enzyme is immobilized on the electrode by both a polymer and a crosslinking agent. Claims 13-15 are readable on the F(m) elected species and are designated for further examination.

It is understood that the Office does not require species election between F(m)(a-b), given that (a) corresponds to the polymer of F(m) and (b) corresponds to the crosslinking agent of F(m).

In response the Office's co-sub-species restriction of F(m)(a)(p-q), Applicants elect sub-species F(m)(a)(p), which is whereby the polymer is polyvinylimidazole. Claim 14 is readable on the F(m)(a)(p) elected sub-species and is designated for further examination.

In response the Office's co-sub-species restriction of F(m)(b)(i-ii), Applicants elect sub-species F(m)(b)(i), which is whereby the crosslinking agent is polyethylene glycol diglycidyl ether. Claim 15 is readable on the F(m)(b)(i) elected co-sub-species and is designated for further examination.

CONCLUSION

Applicants believe that the claims as presented represent allowable subject matter. If the Office desires, Applicants welcome a telephone interview to expedite prosecution. Applicants petition the Office for a two month extension of time and submit herewith the requisite extension fee paid by credit card via EFS-Web. The Commissioner is hereby authorized to credit any overpayment or deduct any deficiency not covered by this credit card payment with respect to this response to Deposit Account No. 19-3140.

Respectfully submitted,

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